WHAT IS CLAIMED IS:

1. An image control apparatus for controlling a process of coding an image signal, comprising:

comparison processing means for carrying out at least one of a first comparison process to compare a motion vector with a threshold, a second comparison process to compare a motion-compensated predictive error with a threshold, and a third comparison process to compare a difference value produced by subtracting the motion-compensated predictive error from an interframe difference with a threshold; and

repetitive number control means for adaptively controlling the number of repeated B pictures to be inserted into a stream based on the compared result of the comparison process which is carried out by said comparison processing means.

2. An image control apparatus according to claim 1, wherein said repetitive number control means comprises means for increasing said number of repeated B pictures if said motion vector is determined as smaller than said threshold in said first comparison process, and decreasing said number of repeated B pictures if said motion vector is determined as greater than said threshold in said first comparison process.

3. An image control apparatus according to claim 1, wherein said repetitive number control means comprises means for increasing said number of repeated B pictures if said motion-compensated predictive error is smaller than said threshold, and decreasing said number of repeated B pictures if said motion-compensated predictive error is greater than said threshold.

4. An image control apparatus according to claim 1, wherein said repetitive number control means comprises means for increasing said number of repeated B pictures if said difference value is greater than said threshold, and decreasing said number of repeated B pictures if said difference value is smaller than said threshold.

5. An image control apparatus according to claim 1, wherein said repetitive number control means comprises means for relating the compared result of said first comparison process, the compared result of said second comparison process, and the compared result of said third comparison process to each other to increase, hold, or decrease said number of repeated B pictures.

6. An image control apparatus for controlling a process of coding an image signal, comprising:

scene change detecting means for detecting the occurrence of a scene change based on an interframe

difference average representing an average of interframe differences of one picture; and

picture insertion control means for inserting an I picture into a stream if a scene change is detected by said scene change detecting means.

7. An image control apparatus according to claim 6, wherein said scene change detecting means comprises means for detecting the occurrence of a scene change if said interframe difference average is greater than a threshold.

8. An image control apparatus according to claim 6, wherein said scene change detecting means comprises means for detecting the occurrence of a scene change if the number of blocks in which the difference between a block average of pixel data in each of blocks converted from a picture and the interframe difference average is greater than a given value is greater than a predetermined number.

9. An image control apparatus according to claim 6, wherein said scene change detecting means comprises means for detecting the occurrence of a scene change if said interframe difference average is greater than a threshold and also if the number of blocks in which the difference between a block average of pixel data in each of blocks converted from a picture and the interframe difference

average is greater than a given value is greater than a predetermined number.

10. An image control apparatus according to claim 6, wherein said scene change detecting means comprises means for detecting the occurrence of a scene change if a change in said interframe difference average is greater than a given value and represents an abrupt change.

11. An image control apparatus according to claim 6, wherein said scene change detecting means comprises means for detecting the occurrence of a scene change if said interframe difference average is lower than a threshold, and also a change in said interframe difference average is greater than a given value and represents an abrupt change.

12. An image control apparatus for controlling a process of coding an image signal, comprising:

comparison processing means for carrying out at least one of a first comparison process to compare a motion vector with a threshold, a second comparison process to compare a motion-compensated predictive error with a threshold, and a third comparison process to compare a difference value produced by subtracting the motion-compensated predictive error from an interframe difference with a threshold;

repetitive number control means for adaptively controlling the number of repeated B pictures to be inserted into a stream based on the compared result of the comparison process which is carried out by said comparison processing means;

scene change detecting means for detecting the occurrence of a scene change based on an interframe difference average representing an average of interframe differences of one picture; and

picture insertion control means for inserting an I picture into a stream if a scene change is detected by said scene change detecting means.